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ABSTRACT

A qualitative study examined the uses to which 14 adult learners put their acquired knowledge from a graduate-level course in organizational behavior both in and outside classroom settings. The course goal was to empower learners to use organizational theory to improve the performance of vocational education personnel. The 14 learners, who ranged in age from 25-52, were required to complete a group simulation that was based on a situated cognition theory called CEO (Changing Educational Organizations) and that required learners to work in teams to design a model educational organization with the purpose of educating future workers who are critical thinkers/problem solvers. The final product of the simulation was a proposal submitted to a hypothetical state education agency for consideration as a demonstration site. On the basis of data collected through observations of the learners' performance, midcourse evaluations, and the final proposals, it was concluded that instructional strategies based on collaborative learning and creating an environment of trust gave learners opportunities to view their acquired knowledge from alternate viewpoints and that articulation of ideas further enhanced reflection on the meaning/application of information. (Contains 29 references. Selected comments from six learners are appended.) (MN)

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Learning Within a Situated Cognition Framework: Implications for Adult Learning

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Learning Within a Situated Cognition Framework: Implications for Adult Learning

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Concern that college teaching frequently does not empower graduate learners to solve problems in their professional lives led to the formulation of this research. In this study, we seriously question the traditional power relationship that often exists between professors and students and believe the view of *professor as dispenser of knowledge* is much too confining and potentially exclusionary. Therefore, we used a theoretical framework that encourages collaborative learning and teaching where class members were invited to become full members of a community of scholars enjoying the excitement and freedom that can result from the collaborative construction of new and meaningful knowledge (Brooks & Brooks, 1993). Because of this perspective, students in this research project were considered colleagues, co-learners, and collaborative researchers.

Fourteen participants were enrolled in a graduate-level organizational behavior course. The goal was to empower learners to use organizational theory to improve the performance of vocational education personnel. Learners were encouraged to think critically and creatively about their roles in their organizations and to use new knowledge to understand and solve problems in these organizations. Included in this course was a group project/simulation based on situated cognition theory entitled Changing Educational Organizations (CEO). To complete the CEO simulation, learners had to work as a member of a team to design a model educational organization with a purpose of educating future workers who are critical thinkers and problem solvers. Learners needed to apply their theoretical knowledge about organizations as they collaborated with team members to collectively decide how to tackle and organize this very challenging project. The final product of the simulation was a proposal submitted to a hypothetical state education agency for consideration as a demonstration site.

The purpose of this qualitative research was to explore (a) how learners used acquired knowledge from this course in and outside of the class setting, and (b) how this information can be applied to future adult teaching and learning situations. Instructional

strategies for this course were based on situated cognition theory and cognitive apprenticeship teaching methods. Data was collected using participant observation and field notes, document analysis, semi-structured interviews, and were analyzed using analytic induction. In this paper, confirmatory, nonconfirmatory and unexpected findings are reported along with the researchers' reflections on this project.

Theoretical Framework

Situated Cognition

Situated cognition examines the learning that occurs in everyday events and settings. Situated learning can be conceptualized as having at least four interrelated aspects. Learning: (a) is best situated in the context of authentic practice, (b) transfer, if it exists, is limited to similar situations, (c) is primarily a social phenomenon, and (d) often relies on the learner's conceptualization and use of prior knowledge. Authors of this theory, Lave and Wenger (1991), view learning as an integral part of social practice in the lived-in world where individuals encounter learning situations within the context of their immediate settings including many interacting elements such as people, equipment, atmosphere, and tasks to be completed (Lave, 1988). Participation in these settings becomes a way of engaging the learner by "...both absorbing and being absorbed in - the culture of practice" (Lave & Wenger, p. 95). Legitimate peripheral participation involves learning by doing with increasing participation, responsibility, ownership, and finally membership in the authentic work of the community. Thus, learning enables an individual to become a member of a community of knowledge and practice (Roschelle & Clancey, 1992). The CEO simulation likewise required each group to formulate and learn within their own culture of practice and each group member was required to create his or her own role to be played in the learning community.

Lave and Wenger (1991) characterize the potential to use knowledge in more than one setting as *generalizable knowledge*. They posit that knowing a:

> general rule by itself in no way assures that any generality it may carry is enabled in the specific circumstances in which it is relevant. In this sense, any power of abstraction is thoroughly situated, in the lives of persons and in the culture that makes it possible. (p. 34)

In other words, generalizability of acquired knowledge to other situations is rare and unpredictable. "The generality of any form of knowledge always lies in the power to

renegotiate the meaning of the past and future in constructing the meaning of present circumstances" (p. 34). Detterman (1993), argues that there is no general cognitive skill that promotes learning transfer, and emphasizes the importance of contextualized learning. Like Detterman, we believe that teaching should facilitate learning in a situation as close as possible to the one where the learning will be applied. In this way, knowledge has a better chance of being activated when it is needed (Sternberg & Frensch, 1994).

Cognitive Apprenticeship

Cognitive apprenticeship uses the traditional concept of craft or trade apprenticeship as a prevailing metaphor for teaching authentic activity through guided experience by focusing on the teaching of symbolic mental skills. Principles of cognitive apprenticeship have recently been adopted to organize instructional environments for acquisition of active knowledge and has been advanced as an appropriate means of teaching through the use of *situated* activities (Brown, Collins, & Duguid, 1989).

The CEO simulation was founded on four interacting elements - content, methods, sequence, and sociology (Berryman, 1991; Collins, Hawkins, & Carver, 1991). *Content* refers to the types and levels of knowledge required by experts to solve complex problems in the real world. *Methods* refer to the instructor's role as a mediator or facilitator of learning rather than a provider or transmitter of knowledge. Likewise, learners emerge as active participants who guide the learning process rather than assume passive roles. Instructional *sequence* can be thought of as three basic strategies including increasing knowledge capacity, increasing contextual diversity, and presenting global skills before local (Brown, et al., 1989). The final characteristic, *sociology*, emphasizes the importance of beliefs, values, and social settings in which real-world learning takes place. Four aspects of sociology are important including situated learning, community of practice, intrinsic motivation, and maximizing cooperation. The teacher becomes a facilitator in developing a community of practitioners, and the community becomes the social foundation for an environment where both collaborative and individual learning can take place.

The building blocks of cognitive apprenticeship are not new to education, but taken together they do define an effective learning situation (Berryman, 1991). These elements constitute the framework of a very different classroom, including different roles for teachers and learners. These aspects of cognitive apprenticeship are employed to encourage collaboration and cooperation among learners and instructors to enhance the collective

problem-solving capabilities of the group. These approaches enhance the learner's ability to gain control of their metacognitive strategies while affording additional opportunities for learners to observe and emulate expert models of problem-solving.

Cognitive Apprenticeship Teaching Methods Rely Heavily on Articulation and Reflection

We explored the elements of cognitive apprenticeship through extensive use of articulation and reflection learning and teaching techniques. These are important elements of cognitive apprenticeships and are based on the research of Brown, et al. (1989), Lave (1988), and Schell and Rojewski (1993). As a facilitator, teachers in a cognitive apprenticeship model employ articulation and reflection instructional methods that capitalize on the immersion of learners in the culture of expert practice. *Articulation* methods are used in an effort to encourage learners to verbalize their knowledge, reasoning, or approaches to problem-solving (Brown et al., 1989). *Reflection* strategies further enhance learner competence by enabling them to compare their own mental problem-solving against those of an expert (Schon, 1983).

Methods

Participants

Class members ranged in age from 25 to 52, with only two members under 30 years of age and the majority in their forties. Teaching experience of the class members ranged from one to twenty-one years. Most class members commuted to the university on weekends after working full-time all week at their jobs in secondary and post-secondary settings as administrators and teachers around our state. They are nontraditional learners who are affectionately called the "weekend warriors" by faculty within our department. They have families, friends, jobs, and lives that are quite apart from campus life. These learners comprise a very disparate group of learners with diverse needs and expectations about the classes they take.

Data Collection Methods

Two principal research methods were employed in support of our inductive strategy. First, unobtrusive methods were used to collect data from documents that were generated as a natural part of the class (Denzin, 1978). These procedures included observations of learner performance in small groups, mid-course evaluations, instructional activities, and proposals that resulted from the CEO simulation. Detailed field notes were compiled by both researchers throughout the course of the study.

Second, semi-structured interviews were used for the purpose of capturing the expression of opinions and beliefs of respondents (Merriam, 1988). Six learners who represented each work group were selected for interviews with the first author. It was felt that the first author's role as a class member and participant observer allowed more freedom for respondents to be frank and forthcoming in their remarks. A semi-structured interview approach was used to ask similar questions of each interviewee while still allowing each respondent to take the interview in directions he or she wished within the framework of the research (Husband & Foster, 1987). The richness of this approach lies its flexibility to explore the important aspects of each respondent's experience.

Analysis Strategies

All data sources, including field notes, midcourse and final course evaluations, class members' written reflections, and interview transcriptions, were examined using analytic induction (Robinson, 1951; Znaniecki, 1934). Husband and Foster (1987) define this strategy as a "systematic attempt to code data while also generating theories about the data being coded" (p. 56). In analytic induction, data are studied in light of preformulated hypotheses with emphasis on the identification of negative cases that refute these hypotheses. Discovery of a single negative case is held to disprove the hypothesis and require its reformulation. In this research, we also placed emphasis on identifying cases that confirmed various aspects of the preliminary hypotheses. The preliminary hypotheses were continually refined and reformulated until all examples were accounted for and explained (Goetz & LeCompte, 1981). No analytic induction research is ever considered final. From this perspective, reality is viewed as incessant and constantly changing (Znaniecki, 1934). The preliminary hypotheses were:

1)	Learners who perceived course materials as pertinent to their work/professional situations were more likely to use their knowledge to solve organizational problems in the workplace.
2)	Learners who perceived the class simulation as more "real" were more likely to use the material to solve organizational problems outside of class.
3)	Articulation instructional practices enhanced learners' active use of acquired knowledge.
4)	Reflective instructional practices enhanced learners' active use of acquired knowledge.

Each data source was analyzed paragraph by paragraph for congruence or noncongruence with the hypotheses and for emerging themes. According to Patton (1990) an inductive approach begins with experiences of each individual where the focus in on "full understanding of individual cases before those unique cases are combined or aggregated" (p. 45). Therefore, themes that emerged as a whole were examined after an analysis of individual cases. These findings were further analyzed by each researcher resulting in separate written summaries of themes and connections between themes according to expected and unexpected findings. These findings were then placed in the context of a written report. Selected respondents were asked to examine the report checking quotes and interpretations for accuracy. Written summaries of each researcher's perspective were then combined and edited to form a final version.

Findings

Because a more complete description of the research findings of this study can be found elsewhere (Schell & Black, 1995), our findings will be listed here only briefly. However, a few selected quotes from each interviewee are included in the appendix to this paper. The decision to briefly review the findings is consistent with the purpose of this paper which is to concentrate on the implications of this research rather than on the findings themselves.

Confirmatory Findings

Learners take action. The degree to which class members empowered themselves to use their acquired knowledge varied widely. In some cases the learning experience was

extended into individual's working lives and co-learners did take direct action as a result of their experiences in this class. One class member was empowered to make an important contribution to his/her organization by participating in legal action involving minority hiring and promotion. Other class members used course information to make changes in the culture of the classrooms where they interacted with students every day. After much reflection, we came to accept these actions as limited evidence of learning transfer.

Articulation in an environment of trust. Within the context of our research, some level of trust was engendered as learners were encouraged to carefully consider the viewpoints of all members of the learning community. In fact, learners began to embrace hearing others' points of view as part of the learning experience. Once a level of trust was developed, learners were asked to articulate relationships between theory and real world practices through the use of probing questions. One class member spoke about how articulation instructional methods became a way of promoting alternate ways of viewing an issue, thus broadening the perspectives of class members and expanding the ability to make connections. But, this unique kind of articulation depended on the development of a culture of trust and safety among class members.

Trust and articulation contribute to reflected meaning. A goal of this class was to encourage learners to question existing management practices. We believe critical reflection involves hearing others' opinions and considering alternate views in the context of personal action. A few individuals reported looking at their organizations differently resulting in an increased understanding of organizational practices. Asking the right question at the right time further maximized opportunities for learners to express their points of view. In discussing their knowledge, learners revealed conceptions, shared reflections, and grew intellectually through the literal construction of knowledge that was new and meaningful to them (Brooks & Brooks, 1993). Trust and articulation promoted reflection on practice and contributed to socially constructed and negotiated meaning of how course content applied to real world settings. One learner stated that the class ethic of trust that engendered involvement and participation encouraged learners to verbalize their acquired knowledge. Another learner spoke of how this form of articulation led to personal reflection on the meaning and application of course materials.

In summary, it was our experience that articulation instructional strategies provided many opportunities for learners to view their acquired knowledge from alternate viewpoints.

In this context, articulation of ideas further enhanced reflection on the meaning and application of information.

Nonconfirmatory Findings

Different knowledge uses for different persons. During data analysis, it became obvious that class members had different reasons for being in the class, different expectations for what they wanted to learn from the class, and dissimilar ideas about how to apply the material to their outside lives. In this regard, Schon (1987) has stated:

> "when a practitioner sets a problem, he [or she] chooses and names the things he [or she] will notice...and selects things for attention and organizes them guided by an appreciation of the situation.... Those who hold conflicting frames pay attention to different facts and make different sense of the facts they notice." (p.4-5)

Because different motivational factors operate for each individual, it is not surprising that class members used the information in different ways. Patton (1990) stated that "a common activity for all learners can result in drastically different outcomes for different individuals depending on how they approached the experience, what their unique needs were, and which part of the activity they found most stimulating" (p. 98). We believe this was very evident in this group of learners. Each came to the class with a different agenda depending on what they expected. This influenced what aspects caught their attention, and what they eventually took with them from the class. For Learner #1, it was self-esteem, communication, courage to make changes in her own classroom and empowerment through documentation of events at the school. For Learner #2, it was seeing the perspectives of others and trying some new instructional approaches in his own classroom. For Learner #3, it was looking at how organizational hierarchy works and making fundamental changes in the classroom especially dealing with changes in the assumptions about how knowledge is acquired. For Learner #4, it was the courage to make a significant change in his/her organization by testifying in a discrimination lawsuit and also by extending this to become more involved in community affairs. For Learner #5, it was seeing how to make changes in postsecondary institutions across the state in a research capacity. And yet, for Learner #6, the class was a disappointment because it was too *theory oriented* and not practical enough.

In the early stages of our analysis, we observed that some learners attempted to make changes in organizations while others made changes in the culture of the classrooms

where they taught. Upon reflection, re-reading transcripts, and member-checks with participants, we decided that we could not categorize organizational change as more active than classroom change. So, we reanalyzed the data in light of the different *ways* people used the information. Learners used course information in ways that best suited their personal and professional needs and they were empowered to take charge of their own learning. As John Dewey stated:

> He has to see on his own behalf and in his own way the relations between means and methods employed and results achieved. Nobody else can see for him, and he can't see just by being "told," although the right kind of telling may guide his seeing and thus help him see what he needs to see. (1974, p. 151)

CEO simulation consists of varying levels of "situatedness". We observed several instances where learners were engaged at different levels of situatedness with the CEO simulation. Even allowing for individual differences, the simulation was simultaneously perceived by class members as real and not real. Some learners perceived the biggest differences between the simulation and the real world to be the level of risk involved and the freedom to try new things without administrative or public backlash. Learners were encouraged to think about the ideal school situation and conditions for optimal learning, but CEO does not require learners to deal with the sometimes harsh realities of resistance to change in educational organization.

Although most learners described themselves as engaged with and highly motivated by the CEO simulation there is further evidence that the simulation was perceived mainly as an academic exercise. While it is true that much of the course content involved research in organizational behavior, the class did have a strong ethic of interpreting that literature in the context of everyday situations. For some learners, however, this particular application was not sufficiently authentic to engender strong expectations or connections between theoretical knowledge and the real life *tricks of the trade*. In this way, the CEO simulation was perceived by our co-learners as simultaneously real and not real.

Unexpected Findings

Unnecessary competition may inhibit trust, thus affecting articulation and reflection. While trust enhanced articulation and reflection, there was evidence on the other side of the coin to suggest that when levels of trust were reduced, articulation was also more limited. Dividing the class into groups produced an element of perceived competition which served

to simultaneously enhance and inhibit learning. Competition enhanced learning by providing motivation to form groups that were cohesive, working together to produce a good quality project. But, the negative side of competition reared its ugly head towards the end of the quarter resulting in limited sharing of ideas and protected *turf*. Perceived competition inhibited the benefit of gaining different perspectives from others' viewpoints and the sharing of information. Another way that competition inhibited the learning process was that work groups were not open to new information near the end of the quarter.

The element of competition also shows support for motivation coming from within the groups rather than from the instructor, thus providing a potential support for self-empowerment. We found evidence that group members had more power over individuals than did the instructor with motivation for quality in the project coming from other group members rather than from the grade they would receive from the instructor.

Initial tension resulting from the ambiguity of the CEO simulation. A little over half of the comments expressed during a mid-course evaluation involved wanting more structure or guidelines for the project. At the end of the course, however, learners better understood the role of ambiguity. CEO is composed of what King and Kitchener (1994) would describe as a series of ill-structured problems where there are few right or wrong answers. The ambiguity of the activity leads learners to often ask questions such as "Is this right?" or "Is this what you want?" Because learners should explore these complex problems within the framework of their own expectations for learning, the facilitator's answers were something like "How are you going to back that up?" or "How do those theories connect with each other?" When really pushed for assurance, the facilitator might say "It looks like your group is heading in a profitable direction." During the early stages of the simulation, learners were often upset by the lack of direct answers to these specific questions.

Schon (1987) agrees that "problems of real-world practice do not present themselves to practitioners as well-formed structures. Indeed, they tend not to present themselves as problems at all but as messy, indeterminate situations" (p. 4). However, the ambiguity of the project, did provide an environment where reflective thinking could occur. "Reflective thinking is called for when there is awareness of a real problem or when there is uncertainty about a solution. Reflective judgments are based on the evaluation and integration of existing data and theory into a solution about the problem at hand" (King & Kitchener, 1994, p. 8). The ambiguity or ill-structured nature of the simulation promoted reflection as did the

articulation instructional methods. But, learners initially experienced some tension with the instructional methods as well.

Learners were initially uncomfortable with cognitive apprenticeship methods. We found evidence that at first, articulation was difficult as were the alternate forms of instructional sequence (*i.e.*, global before local). Several learners stated that tension arose from the expectation that they would need to actively participate, articulate and support their positions on issues. While some members spoke of uncomfortable silences during the first few weeks of class, the comfort level increased and learners became more relaxed as time progressed. As learners became more relaxed with the new instructional methods, articulation became a way of activating knowledge. We later realized that the real foundation for the articulation and reflection instructional methods was *mutual trust*. Before learners would openly articulate opinions (which promotes seeing others' perspectives), a certain level of trust had to be present.

Reformulated Hypotheses

Consistent with analytic induction, we reformulated our hypotheses based on the above findings. The reformulated hypotheses are:

1) When unnecessary competition between groups is perceived, it may serve to inhibit communication and possibly restrict the learning connection between articulation, reflected meaning, and socially constructed knowledge.
2) When learners experience contextualized learning "situated expectancies" are present within each individual. Under the right conditions, these expectancies can lead to self-empowered learners potentially resulting in more active use of constructed and/or transferred knowledge.
3) When cooperating learners cultivate an atmosphere of trust and safety, individuals often empower themselves. Such empowerment can enable articulation of newly constructed knowledge, therefore, promoting *reflected meaning*.

Implications for Adult Learning

From our findings and our reconstituted hypotheses, five themes emerged that have implications for adult learning and the teaching of adults. The following is a brief statement of those main topics followed by a selected amplifying comments. Several of these themes

will be more thoroughly discussed in our reflections at the end of the paper.

1) Teachers Encouraging Students to Participate in a Community of Learners
   - Activities for team-building should be conducted when cooperative work groups are formed in classes.
   - Once an atmosphere of trust is developed, articulation and reflection can then become more powerful tools for activating knowledge.

2) Individuals Learning as a Member of a Community of Learners.
   - From the beginning of class, individual adult learners often have different expectations for what they will learn and how they intend to use course information outside of the classroom.
   - Learner expectations of are often transitory and frequently change throughout a quarter or a semester.

3) Instruction in Situated Learning Environments
   - Instruction should strive to align elements of the situated learning environment with the current expectations of the learners.
   - Acquired knowledge can be activated using Sternberg and Frensch's (1994) four mechanisms of transfer and principles of cognitive apprenticeship.
   - Instructional strategies should be varied throughout the life-cycle of the class.

4) Situated Learning in a Classroom Environment
   - Classroom-based simulations such as CEO are only partially situated when compared to the spirit of the situated cognition literature.
   - When appropriately situated in a community of practice, a simulation can highly motivating – offering learners freedom to be creative.

5) Group Processes Within a Community of Learners
   - Perceived competition between class members can have positive **and** negative effects.
   - A sense of community is related to the quality and satisfaction with the final product produced by a work group.

Reflections on the Research

Community of Learners

As we reflected on how the class and project contributed to building a community of learners several themes emerged. These were additional opportunities for refection in action. Those themes were: (a) the work groups went through various stages with each group experiencing the stages quite differently, (b) groups with a well developed sense of community and shared purpose emerged with stronger products that had more personal meaning, (c) less cohesive groups were not as satisfied with the process or the final product.

As expected, the work groups in our study went through various stages in becoming communities of learners. What was surprising is how each group negotiated these stages differently. All groups went through stages of confusion, idealism, and pragmatic (technical aspects) handling of the project. However, these stages occurred at different times for each group and lasted different lengths of time. Two groups dealt with the pragmatics first, assigning each person responsibility for a separate part of the project. Members of these two groups later went through confusion and idealism individually as each person struggled then had insights about how to complete their specific assignment. In these two groups strong leaders emerged. Bonds between members of these groups were formed in spite of the leaders, not because of them. In other words, the leaders did not pull the groups together.

The other group spent the first few weeks discussing the purpose and what they would like see in an ideal school. Confusion occurred for the group as a whole rather than for separate individuals, and the pragmatics were dealt with last. This group worked very hard the first few weeks on developing a sense of community and shared purpose. This group appeared to be making much slower progress because they did not have anything in writing while the other groups had their projects half completed. This group felt that the time they spent discussing (articulation) helped them to form bonds, approach the project with similar goals, and create a shared vision of what was important individually and collectively. Parts of the simulation took on personal meaning for each group member. This was demonstrated in the months following when each member of this group completed independent research in areas they became interested in during completion of the CEO simulation. This group was also the most cohesive, enjoyed the process of becoming a

learning community, and were most satisfied with the final product.

Instruction

Upon reflection we learned that perhaps more direct instructional intervention was needed with the less cohesive groups. Groups as well as individuals need individualized scaffolding and fading instructional methods. An instructor's methods of facilitation must be adapted to fit individuals, work groups (teams), and the class as a whole. When instructors take on the less traditional role of a facilitator they must rely more on reflection-in-action (Schon, 1987) than on pre-planning.

Instructors learning to teach using these principles often find it difficult. This is a process of empowering students so that they can take charge of their own learning. When a community of learners become engaged with their subject matter, the shared knowledge of the class has far greater impact than the contribution of individual learners. Situated learning and teaching is probably most effective when groups of learners construct their own meanings and processes in social environments. In a way, enabling this type of learning environment requires teachers to give up some of the control traditionally held by teachers. This is often very difficult. Yet, our research strongly encourages the position that it is often better to teach from a position of influence rather than to use our natural power as teachers to force learning on learners.

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APPENDIX

Selected Quotes from Learners

Jean

The president in my school has certain ways of doing things, another instructor brought a case against him, and I was called in to testify . . . before a lawyer from the attorney general's office. And we presented the information to a judge. The case involved the school [which is] *thirty years old and has never hired a minority administrator. Yet, it hired some white administrators that only have a high school education and we have a minority person who has a doctorate. . . This president, we feel that he has made a deliberate attempt not to hire minorities so we brought this case before the attorney general. A decision should be rendered within the next six months. I think being in that class made me become a part of that because I have been on board for at least 21 years, but this class really inspired me. Like* [the instructor] *was saying in the class, when you challenge an organization . . . you have to be willing to go the distance, and you have to know that what you're doing is correct, and is best for the institution and I feel that he inspired me to do that from that class. . .* [The class] *was very instrumental in me taking a role in that I think it is going to be good for the community, it's going to be good for the people we serve, and it's going to be good for the minority students on campus . . . its going to be good for the overall organization. It will bring us in line where we should have been in the past.*

[The class discussions] *made you think about the old way that you perceived things and gave you some other possibilities of looking at situations.*

Pat

There were times when during the discussion things would get kind of tense because we weren't sure exactly what answers [the instructor] *was looking for. But after awhile, we just learned that we just needed to be prepared and it got more relaxed as the weeks went along.*

We talked about kinda fluffy, iffy kinds of stuff that -- you know -- sounded real idealistic and it is good to think about those things, but I really didn't see a lot of realistic stuff that could be applied back to individual work situations.

[In other classes] *we actually talked about real life applications for things and not so much theory about what might be -- what could be -- you know -- what theories are out there -- we talked about real stuff what has really worked -- we were challenged to go out and try things and see what would work and then come back and talk about what worked and didn't work....I didn't get that from this particular class.*

Lynn

People in that class couldn't wait to step in. Some would say something and you'd see someone immediately almost jump out of their seat to say something. And they never felt like they could not say anything. In fact, we had several that would contradict even [the instructor]. *And he would say, 'I'm listening' and he would mean it, he would be listening. And I felt very comfortable. I didn't always agree with everything that he said, but if I could justify it, he accepted it and I appreciated that. And it did help the class discussions get going, and it made them even deeper.*

I found [the] *instructional methods were very different from what I was used* [to and] *I was expecting...I said, 'I like this because I'm listening and I'm hearing what is going on and that's what I came for. I wanted something that I could expand. So, I found that the instructional method was great--it suited me.*

Rhonda: Tell me what you mean by expand.

[The instructor] *would ask* [a question and] *he would never tell me a direct answer and sometimes I would say, 'Now, I wish he would tell me the answer.' But, he would make me think...let me reason what the answer would be... that's what I meant by expand. He made me think and that was very good.*

Tracy

The idea of a group making a proposal was very realistic in the sense that in schools, and in vocational education, we are in the process of writing proposals for grants to get monies for programs. And for me it was probably more applicable than actually changing the organization. In a simulation, you don't have the public outcry, the backlash from the public, the administration, or whoever it is that you are trying to change. With a simulation, you are basically just putting it on paper, so everything looks nice, and everything seems possible.

I wanted to work on the simulation. We got involved...in the project and applying some of the things that we learned in class, about how to change organizations, and that was more important than just getting new information and new material.

[The instructor's style of questioning] *really stimulated a lot of class discussion, and got a lot of the students involved, and a lot of good verbal exchanges took place. And one student would take one side of an issue of motivation and someone who read the same article, would have a different perspective..and some good dialogue took place.*

You come to realize..in your own little domain in your classroom, sometimes, you don't get that concerned about the big picture of how things are operated because...once that door is closed, you kind of feel empowered to do what you want to do, and then run your class the way that you want to run it.

Taylor

The classroom atmosphere was relaxed, jovial, and yet at the same time, it was also challenging because [of] *the instructor's method of pulling in the theory into the discussion, really caused everyone to think.*

Because of what you are doing, through the use of those higher learning skills, synthesis and evaluation, you just can't go to a textbook and pull something back out and then regurgitate it. You're having to take a very amorphous kind of a situation and coalesce all these different ideas, thoughts and philosophies, and beliefs, and pull [them] *together into something that is sensible and is potentially useable.*

The experience that we had in the class was that when one student brings up a particular set of circumstances. . . that will spark a thought in another student, and you have a chain reaction that occurs. That gives you a really wide spectrum of different possibilities....any time you can take a real life situation and apply it to an academic point then you will have a good transition, and that was the case here. That the information that we were receiving became meaningful when you could relate it to your everyday working situations.

I think the ambiguity of the project, has [its] *pluses and cons. The cons first, I would say that because it is so ambiguous that you have an anxiety level that goes with this. It takes you out of the mainstream of your educational format that you are use to following which is basically listening to an instructor provide information and then you regurgitate that. This is a quantum leap from that. So there is a discomfort factor when you move away from that. The pro, of course, is that, in real life, you have the kinds of situations that we've experienced with the project, plus, in real life a lot of work that you do is ambiguous. And I find that in my work every day. We'll receive direction from a funding body or from some of our clientele and it is incomplete information and we have to make decisions on how we use that information. So in terms of gaining valuable insight in real world situations, I think that class structure was very helpful and very positive.*

I would say that the only way the style [articulation instructional methods] *inhibits is that you can have instances of mentally blocking when you go from the general to the specific. It's easy to discuss the general because you can draw from life's experiences to make a comparison to the material in the text and the presentation to your own life's experience, and when you go from the general to the specific, then sometimes, you have a tendency, unless you run back to the text to forget exactly what the specifics tend to be.*

Mackenzie

I thought [the instructor's teaching] *technique was very, very good. I have started using it in my own classroom. It makes you think and try to start putting things together... It's just a good way of teaching long term for long range effects. . . Basically, I've just taken* [the course information] *-- like I've used it more in class. I do have a little more insight about how the organization that I work for...* [a local school]*, is set up and things that have happened. Basically, I've tried to incorporate more in my teaching and it seems to be going very well . . . Here we have a case where we've* [been] *asked to do a lot of information research and what we think we need to do to improve our program.*

We were encouraged to discuss a lot of our ideas and thoughts and to ask questions -- I never once felt that I couldn't ask questions or tell an opinion about something that about something that somebody else said. I felt like we all respected each other and there was an atmosphere where there was open discussion and we could say whatever we felt.

The [classroom] *environment enhanced* [motivation] *by having the discussions and the creativity to challenge other people's viewpoints and challenge our own viewpoints.*

At first, [the CEO project] *was more like a project for a class. Then as we got into it, we started making it more personal and it became a project more like it would be a real project. We were meeting deadlines, we were going back and doing a lot of revisions, and I believe it changed from a view of just a project for a paper for a grade,* [to] *a real project.*